Inorganic and Organic Chemistry

SYNTHESIS OF 2, 2':6', 2" – TERPYRIDINE-1,1"-DIOXIDE AND X-RAY DETERMINATION OF TERPYRIDINE DIOXIDE / TETRACYANOBENZENE DONOR-ACCEPTOR COCRYSTAL

Bryce A. Holthouse, Scott E. McKay*, Robert W. Lashlee III,

Department of Chemistry and Physics, Central Missouri State University Warrensburg, MO 64093, USA, bxh54360@cmsu2.cmsu.edu.

2, 2':6', 2'' – Terpyridine-1,1''-dioxide was synthesized in high yield using dimethyldioxirane in acetone. Light yellow X-ray quality terpyridine dioxide (TDO)-tetracyanobenzene (TCNB)cocrystals were grown from methylene chloride in ether diffusion. The cocrystal is found in the monoclinic c 1 2/c 1 space group. The close contacts found in the packing diagram and the spectroscopy of the cocrystals will be discussed.